SEARCH REQUEST FORM 4-373

Requestor's Name: _CHANG_ Serial Number: _____

Date: _____ Phone: _47o-_ Art Unit: _____

Search Topic:
Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Date completed: _____
Searcher: _____
Terminal time: _____
Elapsed time: _____
CPU time: _____
Total time: _____
Number of Searches: _____
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Search Site
_____ STIC
_____ CM-1
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Type of Search
_____ N.A. Sequence
_____ A.A. Sequence
_____ Structure
_____ Bibliographic

Vendors
_____ IG Suite
_____ STN
_____ Dialog
_____ APS
_____ Geninfo
_____ SDC
_____ DARC/Questel
_____ Other

=> fil reg;d stat que 15;d ide can 15 1-10;fil hca;s 15 or 15/d
FILE 'REGISTRY' ENTERED AT 14:18:54 ON 22 APR 94
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STRUCTURE FILE UPDATES: 15 APR 94   HIGHEST RN 154427-83-5
DICTIONARY FILE UPDATES: 21 APR 94   HIGHEST RN 154427-83-5

TSCA INFORMATION NOW CURRENT THROUGH 30 JUNE 1993

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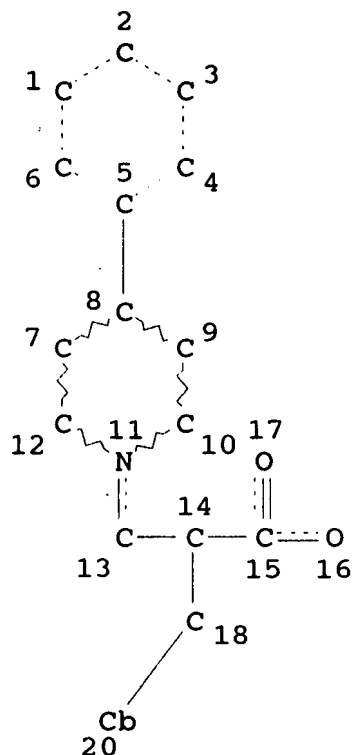
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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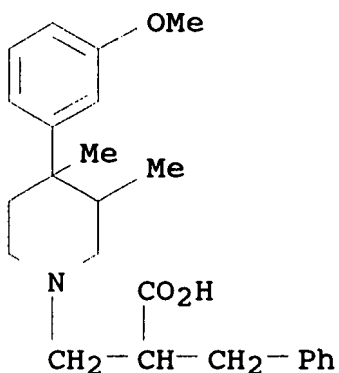
STEREO ATTRIBUTES: NONE
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100.0% PROCESSED   518 ITERATIONS   10 ANSWERS
SEARCH TIME: 00.00.07

L5   ANSWER 1 OF 10 COPYRIGHT 1994 ACS
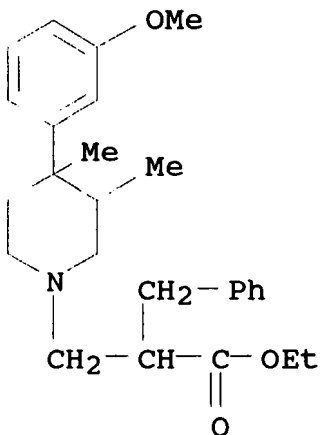RN   149541-68-4   REGISTRY

CN   1-Piperidinepropanoic acid, 4-(3-methoxyphenyl)-3,4-dimethyl-.alpha.-
      (phenylmethyl)- (9CI)   (CA INDEX NAME)
FS   3D CONCORD
MF   C24 H31 N O3
CI   COM
SR   CA
LC   STN Files: CA

1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1:   P CA119(13):139107j

L5   ANSWER 2 OF 10   COPYRIGHT 1994 ACS
RN   145591-57-7   REGISTRY
CN   1-Piperidinepropanoic acid, 4-(3-methoxyphenyl)-3,4-dimethyl-.alpha.-
      (phenylmethyl)-, ethyl ester (9CI)   (CA INDEX NAME)
FS   3D CONCORD
MF   C26 H35 N O3
CI   COM
SR   CA
LC   STN Files: CA

2 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1:   P CA119(13):139107j

REFERENCE   2:   P CA118(13):124401f

L5   ANSWER 3 OF 10 COPYRIGHT 1994 ACS
RN   145591-04-4 REGISTRY
CN   1-Piperidinepropanoic acid, .alpha.-(cyclohexylmethyl)-4-(3-
      hydroxyphenyl)-3,4-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)
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CI   COM
SR   CA
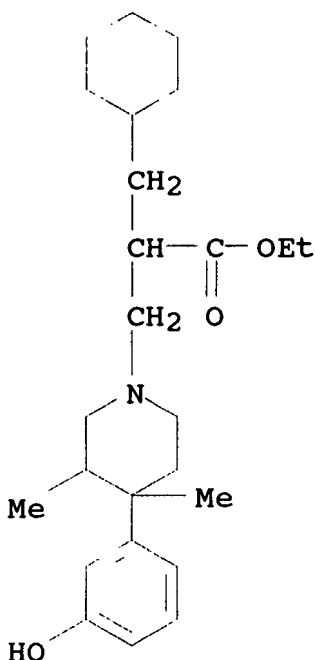LC   STN Files: CA

                2 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1:   P CA119(13):139107j

REFERENCE   2:   P CA118(13):124401f

L5   ANSWER 4 OF 10 COPYRIGHT 1994 ACS
RN   145591-03-3 REGISTRY
CN   1-Piperidinepropanoic acid, 4-(3-hydroxyphenyl)-3,4-dimethyl-.alpha.-
      (phenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)
FS   3D CONCORD
MF   C25 H33 N O3
CI   COM
SR   CA
LC   STN Files: CA

1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1:   P   CA118(13):124401f

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L5    ANSWER 5 OF 10   COPYRIGHT 1994 ACS
RN    145590-78-9   REGISTRY
CN    1-Piperidinepropanoic acid, 4-(3-methoxyphenyl)-3,4-dimethyl-.alpha.-
      (phenylmethyl)-, monohydrochloride (9CI)   (CA INDEX NAME)
MF    C24 H31 N O3 . Cl H
SR    CA
LC    STN Files:   CA
CRN   (149541-68-4)
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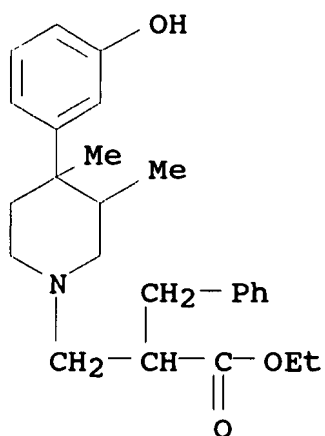

● HCl

2 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1:   P   CA119(13):139107j

REFERENCE   2:   P   CA118(13):124401f

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L5    ANSWER 6 OF 10   COPYRIGHT 1994 ACS
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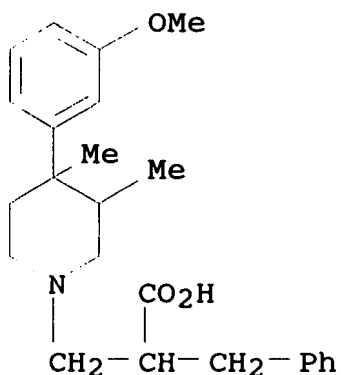
CN   1-Piperidinepropanoic acid, 4-(3-methoxyphenyl)-3,4-dimethyl-.alpha.-
      (phenylmethyl)-, ethyl ester, monohydrochloride (9CI)   (CA INDEX
      NAME)
MF   C26 H35 N O3 . Cl H
SR   CA
LC   STN Files: CA
CRN   (145591-57-7)

● HCl

2 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1:   P   CA119(13):139107j

REFERENCE   2:   P   CA118(13):124401f

L5   ANSWER 7 OF 10   COPYRIGHT 1994 ACS
RN   145590-04-1   REGISTRY
CN   1-Piperidinepropanoic acid, .alpha.-(cyclohexylmethyl)-4-(3-
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FS   3D CONCORD
MF   C23 H35 N O3
SR   CA
LC   STN Files: CA

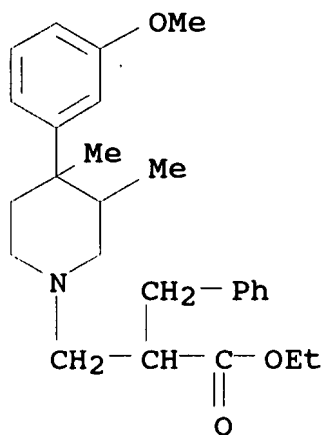**2 REFERENCES IN FILE CA (1967 TO DATE)**

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REFERENCE   2:   P   CA118(13):124401f

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L5     ANSWER 8 OF 10   COPYRIGHT 1994 ACS
RN     145590-03-0   REGISTRY
CN     1-Piperidinepropanoic acid, .alpha.-(cyclohexylmethyl)-4-(3-
       hydroxyphenyl)-3,4-dimethyl-, ethyl ester, hydrochloride (9CI)   (CA
       INDEX NAME)
MF     C25 H39 N O3 . Cl H
SR     CA
LC     STN Files:   CA
CRN    (145591-04-4)
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● HCl

2 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1:   P   CA119(13):139107j

REFERENCE   2:   P   CA118(13):124401f

L5   ANSWER 9 OF 10   COPYRIGHT 1994 ACS
RN   145590-02-9   REGISTRY
CN   1-Piperidinepropanoic acid, 4-(3-hydroxyphenyl)-3,4-dimethyl-.alpha.-
      (phenylmethyl)- (9CI)   (CA INDEX NAME)
FS   3D CONCORD
MF   C23 H29 N O3
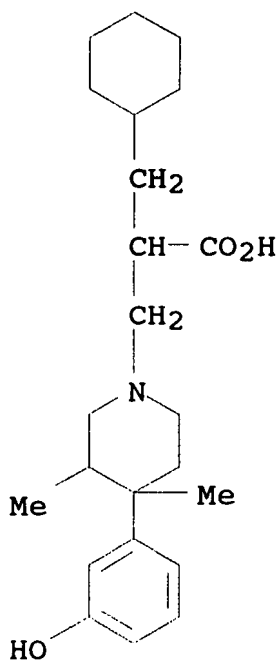SR   CA
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2 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1:   P   CA119(13):139107j

REFERENCE   2: P CA118(13):124401f

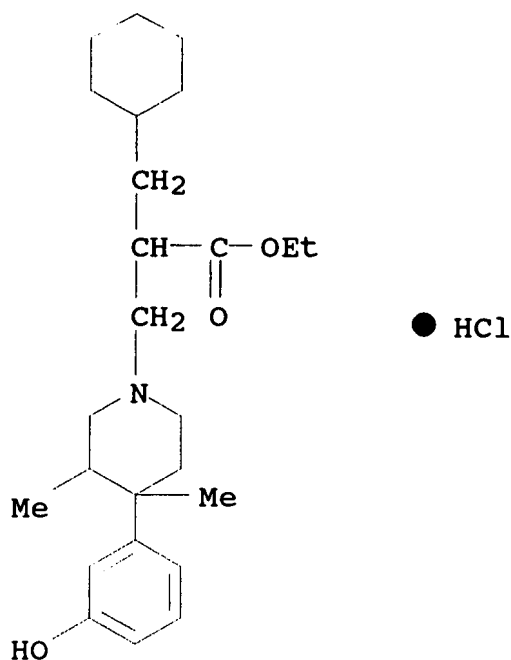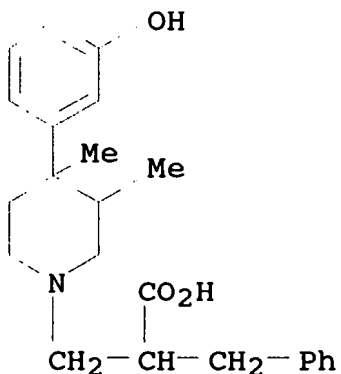L5   ANSWER 10 OF 10 COPYRIGHT 1994 ACS
RN   145590-01-8 REGISTRY
CN   1-Piperidinepropanoic acid, 4-(3-hydroxyphenyl)-3,4-dimethyl-.alpha.-
      (phenylmethyl)-, ethyl ester, hydrochloride (9CI)   (CA INDEX NAME)
MF   C25 H33 N O3 . Cl H
SR   CA
LC   STN Files: CA
CRN   (145591-03-3)
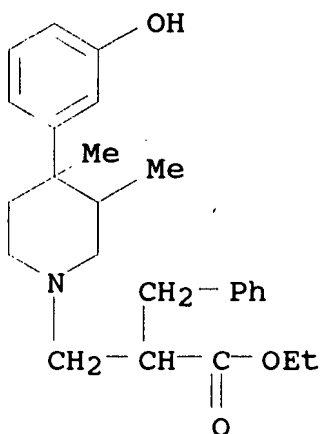
● HCl

2 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE   1: P CA119(13):139107j

REFERENCE   2: P CA118(13):124401f

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FILE COVERS 1967 - 16 Apr 1994 (940416/ED)   VOL 120 ISS 16

          2 L5
          0 L5/D
L6   2 L5 OR L5/D

=> d .caabs 16 1-2

L6   ANSWER 1 OF 2 CA COPYRIGHT 1994 ACS
AN   CA119(13):139107j CA
TI   Preparation of phenylpiperidine derivatives as peripheral opioid
      antagonists.

SO   Can. Pat. Appl., 157 pp.
IN   Cantrell, Buddy E.; Zimmerman, Dennis M.
PI   CA 2064373 AA   920930
AI   CA 92-2064373 920327
PY   1992
AN   CA119(13):139107j CA
GI

AB   Title compds. I (R1 = H, C1-5 alkyl; R2 = H, C1-5 alkyl, C2-6
alkenyl; R3 = H, C1-10 alkyl, C3-10 alkenyl, Ph, phenyl-C1-3-alkyl,
cycloalkyl, C5-8 cycloalkenyl, etc.; A = R4O, R6R5N wherein R4 = H,
C1-10 alkyl, C2-10 alkenyl, cycloalkyl, C5-8 cycloalkenyl, etc.; R5
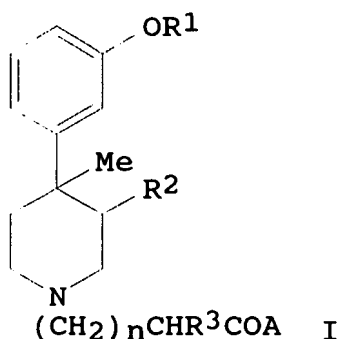= H, C1-3 alkyl; R6 = H, C1-10 alkyl, C3-10 alkenyl, cycloalkyl, Ph,
C5-8 cycloalkenyl, oxadiazolylalkyl, (methyloxodioxolyl)methyl,
etc.; n = 0-4), showing good peripheral .mu. opioid receptor
antagonism, are prepd. These compds. are useful for the prevention
of peripheral side effects assocd. with the use of opioid
analgesics, including constipation, nausea, and vomiting.
Trans-(+)-3,4-dimethyl-4-(3-hydroxyphenyl)piperidine (prepn. given)
and H2C:C(EtO2C)CH2Ph in MeOH were stirred at room temp. to give
trans-I (R1 = H, R2 = Me, R3 = PhCH2, A = OEt, n = 1) , isolated as
the HCl salt. Pharmaceutical formulations comprising I are given.

IT **145590-01-8P 145590-02-9P 145590-03-0P**
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149541-68-4P 149541-69-5P   149541-70-8P   149541-71-9P
149541-72-0P
(prepn. of, as peripheral opioid antagonist)

L6   ANSWER 2 OF 2   CA   COPYRIGHT 1994 ACS
AN   CA118(13):124401f   CA
TI   Preparation of .omega.-(4-phenylpiperidino)alkanoates as peripheral
      opioid receptor receptor antagonists
SO   Eur. Pat. Appl., 79 pp.
IN   Cantrell, Buddy Eugene; Zimmerman, Denis Michael
PI   EP 506478 A1   920930
AI   EP 92-302751   920327
PY   1992
AN   CA118(13):124401f   CA
GI

$$\text{OR}^1 \quad \text{R}^2$$
N(CH2)nCHR3COA

I
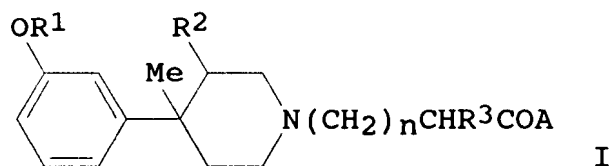
AB   Title compds. I (R1 = H, C1-5 alkyl; R2 = H, C1-3 alkyl, C2-6
      alkenyl; R3 = H, C1-10 alkyl, C1-10 alkenyl, Ph, cycloalkyl, etc.; A
      = R4O, R6R5N wherein R4 = H, C1-10 alkyl, C2-10 alkenyl, cycloalkyl,
      etc., R5 = H, C1-3 alkyl, R6 = H, C1-10 alkyl, C3-10 alkenyl,
      cycloalkyl, Ph, HO2C(CH2)3NH, etc., R5R6 are each CH2 which together
      with N form 4-6-membered heterocyclyl, etc., n = 0-4) or a part
      thereof, useful as peripheral opioid antagonists, are prepd. I.HCl
      (R1 = H, R2 = Me, R3 = cyclohexyl, n = 2, A = HO) (prepn. given),
      H2N(CH2)3CO2Et.HCl and Et3N in DMF were combined with DCC to give I
      [R1 = H, R2 = Me, R3 = cyclohexyl, n = 2, A = EtO2C(CH2)3NH].HCl
      which was converted to the free acid (II). II showed the greatest

antagonism of the peripheral opoid receptors. Pharmaceutical
formulations comprising I are given.
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      145590-14-3P   145590-15-4P   145590-16-5P   145590-17-6P
      145590-18-7P   145590-19-8P   145590-20-1P   145590-21-2P
      145590-22-3P   145590-23-4P   145590-24-5P   145590-25-6P
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      145591-66-8P   145591-67-9P   145591-68-0P   145591-69-1P
      145591-70-4P   145591-71-5P   145603-86-7P   145603-87-8P
      145603-88-9P   145609-45-6P
   (prepn. of, as opioid receptor antagonist)